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In the Official Action, original claim 2 was rejected under 35 U.S.C. § 112 with regard to the use of the word "encoding". Applicant has traversed this rejection in that the new claims provided herewith no longer contain the objected phrases.

In addition, the Examiner rejected original claims 1 and 4 under 35 U.S.C. §112, first paragraph for lack of enablement. Without addressing the merits of this rejection, the rejection has become moot in that the new set of claims are directed to subject matter that the Examiner has acknowledged is enabled by the specification, and thus this rejection is respectfully traversed. With respect to the Examiner's objections regarding the use of the term "selectively hybridizes", Applicants have overcome this rejection by virtue of the attached new claims which provide a percentage of hybridization as disclosed in the specification. In summary, in light of the new claims submitted herewith, all of the Examiner's prior rejections under 35 U.S.C. §112, insofar as applied to the claims as amended, are respectfully traversed and should be withdrawn.

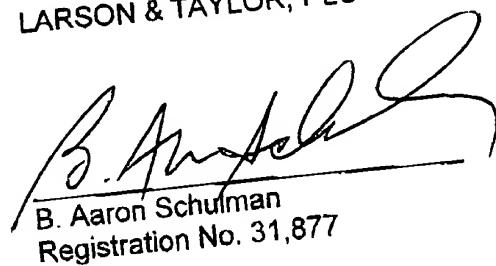
Finally, in the Official Action, the Examiner rejected original claims 1-4 under 35 U.S.C. 102(b) as being anticipated by Hanski et al. Unlike the present invention which relates to a collagen-binding protein, the Hanski et al. reference relates to a fibronectin-binding protein and is thus totally irrelevant to the present claims. The only argument by the Examiner as to how Hanski could possibly be relevant to the claims was that Hanski disclosed isolating chromosomal DNA from *Streptococcus pyogenes*. Without addressing the Examiner's contentions, the rejection has now become moot in that Applicants' claimed subject matter is clearly not disclosed or suggested in the Hanski et al. reference, and thus the Examiner's rejection on the basis of this reference, insofar as applied to the claims as amended, is respectfully traversed and should be withdrawn.

Apr. 17, 2003 9:03AM LARSON &amp; TAYLOR

In light of the present amendments and arguments as set forth above, it is clear that the present application is now in condition for immediate allowance, and such action is earnestly solicited.

Respectfully submitted,

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## ATTACHMENT A

New Claims

*Following herewith is a clean copy of each new claim.*

19. (New) An isolated nucleic acid molecule encoding an amino acid sequence selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:4.

20. (New) An isolated nucleic acid molecule according to Claim 19 wherein the nucleic acid is isolated from group A Streptococcus bacteria.

21. (New) An isolated nucleic acid molecule according to Claim 19 wherein the nucleic acid is isolated from Streptococcus pyogenes.

22. (New) An isolated nucleic acid molecule having a sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3.

23. (New) An isolated nucleic acid molecule according to Claim 22 wherein the nucleic acid is isolated from group A Streptococcus bacteria.

24. (New) An isolated nucleic acid molecule according to Claim 22 wherein the nucleic acid is isolated from Streptococcus pyogenes.

25. (New) An isolated nucleic acid molecule having a sequence that selectively hybridizes to a target sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:3, said sequence that selectively hybridizes having at least 70% complementarity with the target sequence.

26. (New) An isolated nucleic acid molecule according to Claim 25 wherein the nucleic acid is isolated from group A *Streptococcus* bacteria.

27. (New) An isolated nucleic acid molecule according to Claim 25 wherein the nucleic acid is isolated from *Streptococcus pyogenes*.